## LISTING OF CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

## LISTING OF CLAIMS

- 1. (Previously Presented) A method of creating a desired group of a flexible group structure for a network, comprising:
- a) defining one or more private groups, each private group configured for use by one or more first corresponding owners, each private group being unavailable to use by one or more non-owners;
- b) defining one or more public groups, wherein each public group is defined by reference to at least one of said private groups, and wherein each public group is configured for use by one or more second corresponding owners and said one or more non-owners;
- c) selecting one or more particular groups from a set of said one or more private groups and said one or more public groups;
- d) for each selected particular group, indicating whether said selected particular group is to be included in or excluded from said desired group;
- e) associating each of said selected particular groups, with reference to inclusion or exclusion, so as to functionally define said desired group of said flexible group structure; and
  - f) managing network security for said network by using said desired group.

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- 2. (Original) A method as recited in Claim 1 wherein said one or more private groups includes a dynamic group.
- 3. (Original) A method as recited in Claim 1 wherein said one or more private groups includes an exception group.
- 4. (Original) A method as recited in Claim 1 wherein each public group includes a public group component corresponding to each private group used to define said public group, wherein each public group component is configured for use by said one or more first corresponding owners and is unavailable to use by said one or more non-owners.
- 5. (Original) A method as recited in Claim 1 wherein said desired group includes a plurality of users.
- 6. (Original) A method as recited in Claim 1 wherein said one or more first corresponding owners are the same as said one or more second corresponding owners.
  - 7. (Original) A method as recited in Claim 1 further comprising: associating one or more network security privileges with said desired group.
- 8. (Previously Presented) A computer-readable medium comprising computerexecutable instructions stored therein for performing a method of creating a desired group of a flexible group structure for a network, comprising:

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- a) defining one or more public groups, wherein each public group is defined by reference to at least one of said private groups, and wherein each public group is configured for use by one or more second corresponding owners and said one or more non-owners;
- c) selecting one or more particular groups from a set of said one or more private groups and said one or more public groups;
- d) for each selected particular group, indicating whether said selected particular group is to be included in or excluded from said desired;
- e) associating each of said selected particular groups, with reference to inclusion or exclusion, so as to functionally define said desired group of said flexible group structure; and
  - f) managing network security for said network by using said desired group.
- 9. (Original) A computer-readable medium as recited in Claim 8 wherein said one or more private groups includes a dynamic group.
- 10. (Original) A computer-readable medium as recited in Claim 8 wherein said one or more private groups includes an exception group.
- 11. (Original) A computer-readable medium as recited in Claim 8 wherein each public group includes a public group component corresponding to each private group used to define said public group, wherein each public group component is configured for

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use by said one or more first corresponding owners and is unavailable to use by said one or more non-owners.

- 12. (Original) A computer-readable medium as recited in Claim 8 wherein said desired group includes a plurality of users.
- 13. (Original) A computer-readable medium as recited in Claim 8 wherein said one or more first corresponding owners are the same as said one or more second corresponding owners
- 14. (Original) A computer-readable medium as recited in Claim 8 wherein said method further comprises:

associating one or more network security privileges with said desired group.

- 15. (Previously Presented) A method of creating a desired group of a flexible group structure for a network, comprising:
  - defining one or more components of one or more group types; a)
  - selecting one or more particular components; b)
- for each selected particular component, indicating whether said selected c) particular component is an additive component type or a subtractive component type;
- d) associating said selected one or more particular components and each indicated component type so as to function as said desired group of said flexible group structure; and

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- e) managing network security of said network by using said desired group.
- 16. (Original) A method as recited in Claim 15 wherein said one or more group types include at least one of a public group and a private group.
- 17. (Original) A method as recited in Claim 16 wherein each private group is configured for use by one or more first corresponding owners, and wherein each private group is unavailable to use by one or more non-owners.
- 18. (Original) A method as recited in Claim 16 wherein each public group is configured for use by one or more second corresponding owners and one or more nonowners.
- 19. (Original) A method as recited in Claim 16 wherein said private group is a dynamic group.
- 20. (Original) A method as recited in Claim 16 wherein said private group is an exception group.
- 21. (Original) A method as recited in Claim 16 wherein each public group is defined using at least one private group, and wherein each public group includes a public group component corresponding to each private group used to define said public group,

CSCO-104512 Serial No. 10/033,138 6 Art Unit: 2132 wherein each public group component is configured for use by one or more first corresponding owners and is unavailable to use by one or more non-owners.

- 22. (Original) A method as recited in Claim 15 wherein said desired group includes a plurality of users.
  - 23. (Original) A method as recited in Claim 15 further comprising: associating one or more network security privileges with said desired group.
- 24. (Previously Presented) A computer-readable medium comprising computerexecutable instructions stored therein for performing a method of creating a desired group of a flexible group structure for a network, comprising:
  - a) defining one or more components of one or more group types;
  - b) selecting one or more particular components;
- c) for each selected particular component, indicating whether said selected particular component is an additive component type or a subtractive component type;
- d) associating said selected one or more particular components and each indicated component type so as to function as said desired group of said flexible group structure; and
  - e) managing network security for said network by using said desired group.
- 25. (Original) A computer-readable medium as recited in Claim 24 wherein said one or more group types include at least one of a public group and a private group.

CSCO-104512 Examiner: Perungavoor, V. 26. (Original) A computer-readable medium as recited in Claim 25 wherein each private group is configured for use by one or more first corresponding owners, and wherein each private group is unavailable to use by one or more non-owners.

27. (Original) A computer-readable medium as recited in Claim 25 wherein each public group is configured for use by one or more second corresponding owners and one

or more non-owners.

28. (Original) A computer-readable medium as recited in Claim 25 wherein said private group is a dynamic group.

29. (Original) A computer-readable medium as recited in Claim 25 wherein said private group is an exception group.

30. (Original) A computer-readable medium as recited in Claim 25 wherein each public group is defined using at least one private group, and wherein each public group includes a public group component corresponding to each private group used to define said public group, wherein each public group component is configured for use by one or more first corresponding owners and is unavailable to use by one or more non-owners.

31. (Original) A computer-readable medium as recited in Claim 24 wherein said desired group includes a plurality of users.

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32. (Previously Presented) A computer-readable medium as recited in Claim 24 wherein said method further comprises:

associating one or more network security privileges with said desired group.

- 33. (Previously Presented) A method of defining a public group of a flexible group structure for a network, comprising:
  - defining one or more private groups; a)
  - **b**) selecting one or more particular private groups;
- c) for each selected particular private group, indicating whether said selected particular private group is an additive type or a subtractive type;
- d) for each selected particular private group, generating a corresponding public group component;
- generating said public group of said flexible group structure using each e) public group component and each indicated type corresponding to said selected one or more particular private groups; and
  - f) managing network security for said network by using said public group.
- 34. (Original) A method as recited in Claim 33 wherein said one or more private groups includes a dynamic group.
- 35. (Original) A method as recited in Claim 33 wherein said one or more private groups includes an exception group.

CSCO-104512 Serial No. 10/033,138 9 Art Unit: 2132 36. (Original) A method as recited in Claim 33 wherein said public group includes a plurality of users.

37. (Original) A method as recited in Claim 33 wherein each private group and each public group component are configured for use by one or more first corresponding owners, and wherein each private group and each public group component are unavailable to use by one or more non-owners.

38. (Original) A method as recited in Claim 33 wherein said public group is configured for use by one or more second corresponding owners and one or more non-owners.

39. (Previously Presented) A computer-readable medium comprising computer-executable instructions stored therein for performing a method of defining a public group of a flexible group structure for a network, comprising:

- a) defining one or more private groups;
- b) selecting one or more particular private groups;
- c) for each selected particular private group, indicating whether said selected particular private group is an additive type or a subtractive type;
- d) for each selected particular private group, generating a corresponding public group component;
  - e) generating said public group of said flexible group structure

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using each public group component and each indicated type corresponding to said selected one or more particular private groups; and

- f) managing network security of said network by using said public group.
- 40. (Original) A computer-readable medium as recited in Claim 39 wherein said one or more private groups includes a dynamic group.
- 41. (Original) A computer-readable medium as recited in Claim 39 wherein said one or more private groups includes an exception group.
- 42. (Original) A computer-readable medium as recited in Claim 39 wherein said public group includes a plurality of users.
- 43. (Original) A computer-readable medium as recited in Claim 39 wherein each private group and each public group component are configured for use by one or more first corresponding owners, and wherein each private group and each public group component are unavailable to use by one or more non-owners.
- 44. (Original) A computer-readable medium as recited in Claim 39 wherein said public group is configured for use by one or more second corresponding owners and one or more non-owners.

CSCO-104512 Serial No. 10/033,138 11 Art Unit: 2132 45. (Previously Presented) A component-based group structure for a network\_comprising:

a plurality of private groups; and

a plurality of public groups, each public group having one or more public group components, each public group component corresponding to one of said plurality of private groups, wherein a desired group of said component-based group structure is formed by selecting and associating one or more component groups from a set of said private groups and said public groups, and wherein network security for said network is managed by using said desired group.

- 46. (Original) A component-based group structure as recited in Claim 45 wherein said private groups and said public groups can be arranged into a plurality of group hierarchies.
- 47. (Original) A component-based group structure as recited in Claim 45 wherein said private groups includes a dynamic group.
- 48. (Original) A component-based group structure as recited in Claim 45 wherein said private groups includes an exception group.
- 49. (Original) A component-based group structure as recited in Claim 45 wherein each private group and each public group component are configured for use by

CSCO-104512 Examiner: Perungavoor, V. one or more first corresponding owners, and wherein each private group and each public group component are unavailable to use by one or more non-owners.

- 50. (Original) A component-based group structure as recited in Claim 45 wherein said public group is configured for use by one or more second corresponding owners and one or more non-owners.
- 51. (Original) A component-based group structure as recited in Claim 45 wherein said desired group is formed by selecting and associating at least one private group.
- 52. (Original) A component-based group structure as recited in Claim 45 wherein said desired group is formed by selecting and associating at least one public group.
- 53. (Original) A component-based group structure as recited in Claim 45 wherein said desired group is formed by selecting and associating at least one private group and at least one public group.
- 54. (Previously Presented) A method of defining a plurality of group ownership attributes for use in a component-based group structure for a network, comprising:
- a) providing a plurality of group types of said component-based group structure, said group types including a private group type, a public group component

CSCO-104512 Serial No. 10/033,138 13 Art Unit: 2132 type, and a public group type, wherein network security for said network is managed by using said plurality of group types;

- b) assigning a first group ownership attribute to a private group, of said private group type, such that one or more first corresponding owners can use said private group and such that one or more non-owners are unable to use said private group;
- c) assigning a second group ownership attribute to a public group component, of said public group component type, such that said one or more first corresponding owners can use said public group component and such that said one or more non-owners are unable to use said public group component; and
- d) assigning a third group ownership attribute to a public group, of said public group type, such that one or more second corresponding owners can use said public group and such that said one or more non-owners can use said public group.
- 55. (Original) A method as recited in Claim 54 wherein said one or more first corresponding owners are the same as said one or more second corresponding owners.

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